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Section IV:
AMENDMENT UNDER 37 CFR §1.121
REMARKS

Telephone Interview Request

Applicant's agent, Robert H. Frantz, requests a telephone interview with the examiner following examiner's consideration of this reply and amendment and prior to issuance of the next Office Action, in order to facilitate clarification of any of the remarks or amendments made herein, answer any questions the examiner may have, and to consider any suggestions from the examiner in order to place this case in condition for allowance. Applicant's agent requests the examiner to contact him at 405-812-5613 to indicate a date and time when the examiner would be available to receive a telephone call.

Objections to the Claims

In the Office Action, the examiner has objected to the claims for the formality of reciting the term "irrespective".

We have employed the term "irrespective" in our claims using the conventional meaning of the term, as evidenced by a popular online dictionary (emphasis added):

irrespective ... Characterized by **disregard**; heedless. (www.dictionary.com)

ignore .. To refuse to pay attention to; **disregard**. (www.dictionary.com)

Clearly, in at least one manner of usage, "irrespective" means "disregarding", which means "ignoring". By our use of "irrespective", we meant "disregarding" or "ignoring" our meta data in our meta normal forms during our content comparison phase, by ignoring the format or visual presentation information (e.g. glyphs), as explained in paragraph [0074]. We have amended our claims to use the term "ignoring" rather than "irrespective" to aid the examiner in interpreting the meaning and scope of our claims.

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Rejections under 35 U.S.C. 112

In the Office Action, the examiner has rejected claims 1 - 12 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Examiner has stated that the claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention:

"The segment, "meta normal form" was not described in the specification in such a way as to enable one skilled in the art to make or use the invention."

Further, in the Office Action, the Examiner has rejected claims 1 - 12 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, with respect to the recitation of the following steps, elements or limitations, which are considered indefinite: "meta data", "higher order control", "similar or different", "meta normal form", "normal form, "Normal Form Meta Decomposed Form", and "Normal Form Meta Composed Form". Examiner has also stated that it is not clear how composing is performed. Examiner has acknowledged that these deficiencies appear in Claims 1, 5 and 9. Therefore, claims 2 - 4, 6 - 8, and 10 - 12 which depend from claims 1, 5, and 9, respectively are rejected under the same rationale.

The terms "precomposed", "decomposed", "decomposition", "code point", "deprecation" and "normalization" are standard terms and concepts within the science and technology of information representation, and especially for the composition of complex characters for display and printing. The following definitions are readily available to those skilled in the art from the Unicode Consortium website www.unicode.org/glossary:

Code Point. Any value in the Unicode codespace; that is, the range of integers from 0 to 10FFFF₁₆. (See definition D4b in Section 3.4, Characters and Encoding.)

Decomposable Character. A character that is equivalent to a sequence of one or more other characters, according to the decomposition mappings found in the names list of Section 16.1, Character Names List, and those described in Section 3.12, Conjoining Jamo Behavior. It may also be known as a precomposed character or a composite character. (See definition D18 in Section 3.7, Decomposition.)

Decomposition. (1) The process of separating or analyzing a text element into component units. These component units may not have any functional status, but may be simply formal units—that is, abstract shapes. (2) A sequence of one or more characters that is equivalent to a decomposable character. (See definition D19 in Section 3.7, Decomposition.)

Deprecated. A coded character whose use is strongly discouraged. Such characters are retained in the standard, but should not be used. (See definition D7a in Section 3.4, Characters and Encoding.) (Not the same as obsolete.)

Designated Code Point. Any code point that has either been assigned to an abstract character (assigned characters) or that has otherwise been given a normative function by the standard (surrogate code points and noncharacters). This definition excludes reserved code points. Also known as assigned code point. (See Section 2.4, Code Points and Characters.)

Normalization. A process of removing alternate representations of equivalent sequences from textual data, to convert the data into a form that can be binary-compared for equivalence. In the Unicode Standard, normalization refers specifically to processing to ensure that canonical-equivalent (and/or compatibility-equivalent) strings have unique

representations. For more information, see "Equivalent Sequences" in Section 2.2, Unicode Design Principles, and Unicode Standard Annex #15, "Unicode Normalization Forms."

Precomposed Character. (See decomposable character.)

The term "meta data" refers to the commonly known concept of "data about data", most commonly markup languages such as HTML and XML, which use tags to denote display or functional attributes of text, often used in opening and closing tag pairs surrounding the affected text such as [B] this text would be bold [/B], where [B] is the opening bold (e.g. "Bold on") tag, and [/B] is the closing bold tag (e.g. "Bold off"). Widely accepted alternate spellings of "meta data" include "metadata" and "meta-data". We have illustrated in our disclosure [Tag]= for opening tags and ~[Tag] for closing tags. General meta data definitions are readily available to those skilled in the art in professional literature, and only, such as the popular search engine Google.com, which provides the following links to definitions for "meta data definition" (emphasis added):

Data about data, i.e., name, length, valid values, or description of a data element. Meta data is stored in a data dictionary and repository. It insulates the data warehouse from changes in the schema of operational systems. ...
(www.hud.gov/cfo/glossary.html)

...

Selected or summary information about data. PDS catalog objects and data product labels are forms of meta data for summarizing important aspects of data sets and data product. (pds.jpl.nasa.gov/dpw/appc.html)

...

Definition: The information that is contained within the meta tags of a web site. (websearch.about.com/library/glossary/bldef-meta-data.htm)

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Meta data is **information describing the data in the web page or document** it is attached to. The inclusion of meta data in a web document helps indexing and searching processes, and information management.
(its.anu.edu.au/wic/glossary.html)

...

b . Meta data is **data about data or data which describes other data**.
(developer.com/xml/print.php/2106671)

...

The phrase "similar or different" describes a degree of likeness between two more items being compared, except they represent opposite extremes of likeness (e.g. degree of similarity is inversely related to degree of difference). In our usage of the term "similar", we meant "same", and in the usage of the term "different", we meant "not the same". Examiner has incorrectly interpreted similar to mean different, as stated in the Office Action. We have used these terms in the conventional, well-understood manner, as evidenced by definitions available from a popular online dictionary (emphasis added):

- (n) **different** ... 1. Unlike in form, quality, amount, or nature; **dissimilar**...
(www.dictionary.com)
- (o) **same** ... 1. Being the very one; identical...2. **Similar** in kind, quality, quantity, or degree. (www.dictionary.com)
- (p) **similar** ... 1. Exactly corresponding; resembling in all respects; precisely like. 2. Nearly corresponding; resembling in many respects; somewhat like; **having a general likeness**. ... (www.dictionary.com)

Clearly from these common definitions, "similar" is synonymous with "same", and "similar" is antonymous with "different", and thus our claims should be interpreted as a determining a degree of similarity or dissimilarity. To aid the examiner in interpretation of our

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claims, we have amended our claims to replace the phraseology of "similar or different meta normal form" to read "the same meta normal form", as disclosed in paragraphs [0073] and [0079]. Our use of these terms in the conventional manner as previously discussed is found at paragraph [0073] (emphasis added):

... The conversion phase is only performed when the two strings to be evaluated are not in the **same meta normal form**. If the strings are not in the **same meta normal form**, then one of them must be converted into the normal form of the other.

To aid the examiner in interpretation of our claims, we have amended our claims to replace the phraseology of "similar or different meta normal form" to read "the same meta normal form".

The following terms used in our claims are defined in part by these common concepts, and in addition to our disclosure:

"higher order control" and "higher order protocol": our definition for the protocol or process required to modify or prepare the basic information (e.g. "raw data") of a character or word for visual presentation (e.g. a process or protocol used to modify the raw data to include semantics such as glyphs, ligatures, etc.). In our method, we use meta tags to communicate such higher order information. Please see our disclosure at paragraphs [0052], [0062], [0064], and [0065].

meta normal form: our term describing the representation of a character or word which includes meta tags to communicate higher order protocol (e.g. visual presentation indicators such as glyphs, ligatures, etc.) in combination with raw or "pure" data for characters or words. NFMC (composed) and NFMD (decomposed) are two categories of our meta normal forms. Please see our disclosure at paragraphs [0071], Table 5 for NFMC examples, [0073], [0074], and especially [0079]. In this context, "precomposed" form refers to forms which are

not "decomposed" in the same manner as these terms are used in Unicode terminology, for example, but in our invention we are using meta data instead of Unicode code points for the higher order protocol representation.

Normal Form Meta Composed ("NFMC"): our format of a character or word using a combination of meta tags for the higher order protocol (e.g. to represent visual rendering or format instructions) and raw or pure data. Our meta tags for NFMC are defined relative to Unicode semantic constructs in Table 4, and explained in paragraph [0068], and examples are provided in Table 5. Our NFMC format may contain "composed" characters, such as an accented é.

Normal Form Meta Decomposed ("NFMD"): our format of a character or word using a combination of meta tags for the higher order protocol (e.g. to represent visual rendering or format instructions) and raw or pure data in which all composed characters are represented using decomposed characters and meta tags. In this format, a "composed" characters such as an accented é is represented as a set of decomposed characters such as e' (e.g. "e" followed by an apostrophe) with associated meta tags to indicate the set of decomposed characters should be composed prior to visual rendering or presentation. NFMD follows the "decomposition" convention of Unicode, and examples of decomposition using our meta tags (instead of Unicode code points) are given in paragraphs [0072], [0075] - [0078], and illustrated in Figures 11 and 12, with special comparison to Unicode decomposition techniques to aid the reader in understanding of the analogous decomposition of our meta normal forms.

"converting between NFMC and NFMD" is our process for "decomposing" NFMC representations into NFMD representations. In this context, "precomposed" form refers to forms which are not "decomposed" in the same manner as these terms are used in Unicode terminology, but in our invention we are using meta data instead of Unicode code points for the higher order protocol

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representation. We have provided an example of decomposing the precomposed accented character é (precomposed format) to decomposed format e' (e.g. "e" followed by an apostrophe character) at paragraph [0072].

Therefore, the claims, especially in view of the present amendment, meet the enablement requirements, and clearly set forth the subject matter which the applicant considers to be the invention. Title 37 CFR 1.75(d)(1) states:

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)).

The claims, as filed, are not required to employ the exact same terminology as found in the disclosure, however, to meet the antecedent requirements. MPEP 1302.01 states:

"...exact terms need not be used *in haec verba* to satisfy the written description requirement of the first paragraph of 35 U.S.C. 112. *Eiselstein v. Frank*, 52 F.3d 1035, 1038, 34 USPQ 2d 1467, 1470 (Fed. Cir. 1995); *In re Wertheim*, 541 F.2d 257, 265, 191 USPQ 90, 98 (CCPA 1976). See also 37 CFR 1.121(e) which merely requires substantial correspondence between the language of the claims and the language of the specification.

According to MPEP 2173.02, it is preferred Office policy to allow latitude for the applicant to use his or her own terminology:

Some latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiners are encouraged to

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suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement.

The Courts have repeatedly held that claim terms are to be interpreted to have their dictionary or plain meaning unless the applicant has defined them otherwise, and thus their plain or dictionary meaning does not have to be disclosed in the specification:

The terms of a claim carry "their ordinary meaning, unless it appears that the inventor used them differently." ZMI Corp., 844 F.2d at 1579. To determine if the patent uses a term differently than its ordinary meaning, the court should consider the specification and prosecution history. . . *Gargoyles, Inc. v. United States*, 28 USPQ 2d 1715, 1716-17 (Fed. Cir. 1993) (unpublished)

Complex terminology (e.g. terms with multiple words) may be afforded its definitions by using a standard dictionary for the individual words as they related to each other and to the subject matter of the claim. For example, in *In re Barr* (44 F.2d 588, 170 USPQ 330, C.C.P.A. 1971), the claim terminology "phenyl radical" was not defined in the specification, so the CCPA referred to a standard reference book, *Hackh's Chemical Dictionary*, to define the term as a "monovalent radical."

Our claim terms are all defined either explicitly through our disclosure, especially by way of example and illustration, or their definitions are within the normal, ordinary meanings which are well understood within the art. With regard to enablement surrounding any of these terms, as these terms represent processes, elements or limitations (e.g. qualifiers) which are understood in the art, enablement for these portions of the claims is inherent.

For these reasons, applicant requests withdrawal of the rejections and allowance of all claims as amended.

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